Public Schools of North Carolina **North Carolina Instructional Technology Plan**

State Board of Education
Howard Lee, Chairman

Department of Public Instruction
July Atkinson, State Superintendent

REQUIRED SUBSTANTIVE COMPONENTS
OF THE
LOCAL SCHOOL DISTRICT TECHNOLOGY PLAN

The local school board has actively involved key stakeholders in the development of a district-wide four-year technology plan that includes the following key components:

- a vision statement consistent with the North Carolina Instructional Technology Plan that reflects the unique qualities and strategic priorities of your local school system;
  - the identification of the current situation, goals, objectives and evaluation of the core instructional and administrative components of a technology program that address the five strategic priorities of the Future Ready Students:
  - ➢ Globally competitive students
  - ➢ 21st Century professionals
  - ➢ Healthy and responsible students
  - ➢ Leadership for innovation
  - ➢ 21st Century Systems;
- a staff development and training component that reflects a budget of 20 to 30 % of the total cost of the technology program; and
- an infrastructure/connectivity component that meets North Carolina Information Technology Services standards to assure compatibility, connectivity, and cost-effectiveness.

LEA Name: Lee County Schools LEA Number: 530

Signature: _____ _____
Superintendent Local Board Chair

Person of Contact: Cindy Johnson Telephone number: 919-774-6226

Technology Committee Members

All committee members have been involved in the development of this plan and support its implementation.

Name	Title or Group Represented	Signature	Date
Andy Bryan	Assistant Superintendent, Curriculum		10-8-08
Debra Evans	ITF	Debra Evans	10-8-08
Tina Poltrock	Director for Secondary Ed.	Tina Poltrock	10/8/08
James Ray	ITF		10/7/08
Aaron Fleming	CTE Director		10/7/08
Cindy Johnson	CTO	Cindy Johnson	10/7/08
Sharon Clements	Media Specialist	Sharon Clements	10/8/08
Gary Jackson	LCS Interim Superintendent		10/8/08
Carole Troutman	ITF	Carole Troutman	10/6/08
Bob Heuts	Director, Lee County Econ. Dev. Corp.		10/8/08
Glenda Jones	Human Resources Officer	Glenda J. Jones	10/9/08
Danita Russell	ITF	Danita Russell	10/8/08
Sharon Nettles	Director Student Resources	Sharon B Nettles	
Trent Jones	Assistant Principal, SanLee	Trent A Jones	10/8/08
Amy Thomas	ITF	Amy Thomas	10/8/08
Rebel Hunter	LAN Engineer		10/8/08
Darla Cole	SRO	Darla R Cole	10/8/08
Sally Williams	ITF	Sally Williams	

Technology Committee Members

All committee members have been involved in the development of this plan and support its implementation.

Name	Title or Group Represented	Signature	Date
Jim Atkinson	Assistant Superintendent, Aux. Svcs.	Jim Atkinson	10/8/08
Susan Britt	Supt. Admin. Assistant	Susan P Britt	10/8/08
Jan Tart	ITF	Jan Tart	10/8/08
Tammy Howington	CFO	Tammy Howington	10-8-08
Joy Thompson	ITF	Joy Thompson	10/7/08
Bonnie Boggs	ITF	Bonnie Boggs	
Kyle Edwards	MIS Director/Lee County Gov.	Kyle W. Wilder	10/8/08
Lance Tyson		Lance Tyson	

Lee County Schools Educational Technology Plan
2008-2009

Vision Statement

The Lee County School System believes that students need a technology–rich environment to prepare them for life in the 21st century. In a very competitive, digital economy, educational technology is a critical component for providing the tools our students need in order to reach their full potential. It is our goal to provide technology-supportive schools that will allow diverse options for creative teaching so that all students can acquire the skills needed to be successful in the 21st century's global community and workforce. In keeping with the North Carolina vision of building collaborative partners and leadership, a Media and Technology Advisory Committee has developed a system-level technology plan. The presence of relevant software, contemporary delivery systems, and information networks will present students with the means to be globally competitive. The Lee County Schools Technology Plan is based on the academic and administrative needs of the district's students and staff.

Lee County Schools will produce globally competitive students.
Current Situation Narrative

All Lee County Schools strive to integrate technology throughout the curriculum in an effort to create globally competitive students. Teachers utilize technology in various aspects of their responsibilities. Technology plays a key role in increasing student performance in areas as diverse as conducting and analyzing assessments to enhancing instruction every day in the classroom to providing better access to supplementary programs. Teachers take advantage of engaging students through the use of Web 2.0 tools in addition to using Microsoft Productivity Suite and Internet resources.

Teachers and administrators use technology to collect and analyze assessment data through the use of countywide Quarterly Assessments in math and reading, End-of-Grade Tests, End-of-Course Tests, STAR Assessments, Accelerated Math Assessments, Zarca Online Surveys, Quia, CMS, and AIMSweb. For example, teachers use the information gathered through the Quarterly Assessments to develop flexible groups for re-teaching students specific objectives. The Zarca Online Surveys are used to survey staff members regarding their professional development needs, their interest in advanced degree programs, and their assessment of school and district instructional and organizational effectiveness. Teachers and Administrators disaggregate achievement data with the use of ABC tools, EVASS, RTI, and Excel.

Teachers across the district utilize a variety of technologies to deliver core curriculum to our students. Teachers and students across the district are using tools such as laptop computers, desktop computers, LCD Projectors, overhead projectors, SmartBoards, the Internet, United Video Streaming, CD's, DVD's, graphing calculators, mobile computer labs, Writer Ultra Labs, and various assistive technologies for special needs students. As functioning computers are taken off the network they are placed in students homes. Lee County Schools is transitioning to the use of NCWise.

Various technologies are also used to deliver supplementary educational programs to our students. Study Island, NovaNET, AAA Math, BrainPop, Thinking Maps software, summer computer camps for students and teachers, use of personal data assistants (PDA's), Accelerated Reader, Accelerated Math, Classroom Management System (CMS) for reading and math, Harcourt Brace Supplementary Software, Orchard Software, and NCVPS are but a few examples.

Media coordinators in Lee County Schools are working toward implementation of the IMPACT Model for Media and Technology. Secondary schools consistently have open access to libraries and computer labs, and several schools have purchased mobile laptop carts to further increase flexibility for students and teachers. One elementary school has a flexible media schedule every other week. Media coordinators and administrators are meeting to plan how to phase in the Impact model over the next three to five years.

Students in Lee County Schools have access to a number of digital resources and several different distance-learning opportunities. Digital and distance learning resources that enhance student learning include Kaleidoscope, NC Wise Owl, Learn NC, Lee County district and DPI online resources, Video Streaming, online model lessons, Study Island, NCVPS, NovaNET, Online Harcourt Math Software, LearnNC, Apex learning, E-Fieldtrips, SAS in Schools, Learn and Earn, and Huskins classes as well as online tutorials.

Lee County Schools recognizes the need to increase the number of modern computers in each of our classrooms. Currently the schools have an average of 2.5 computers per classroom, in addition to labs. All classrooms in LCS excluding two, have Internet and network access. These two are mobile units that will have access added.

Our classrooms are beginning to expand their borders to other countries as we communicate via Skype and e-mail to other students in other parts of the world. Classes work collaboratively with the use of wikis. Teachers are taking advantage of Think.com opportunities as well.

Technology is being utilized to address foreign language competency and international communications with programs such as Ellis, WorldBook Discovery, and ESL Innovations. English language learners benefit from the use of iPods. Computers have been placed in the homes of the students and parents have been given computer lessons. Laptops have been provided for migrant students.

Each exceptional children class has TV's, computers, Smartboards and projectors. Additional assistive/adaptive technology includes: Cordless Big Red Switch, Air Link Cordless Switch, Power Link 3, Cordless Receiver, Jellybean Switch, Big Mack Communicator, Keys-u-See keyboard, Magic Touch Screen, Mr. Potato Switch Head Switch, Bookworm, Intellitools, Therapeutic Listening, Bose headphones, Interactive Books, Switch Bunny, Put-em Arounds, Go Talk, Drumming Mouse, Smart Talk 4, Say it Rocking Plate, Discover Switch, Talking Plate Switch, Switch Activated Toys, Touch-Talk Board, Coinulator, Coin Abacus, Talking Bookworm, and Leap Pad.

Students with hearing impairments are able to use the following: Phonak Microlink Campus S Trans., Phonak Microlink MLX S Receiver, Phonak Inspiro Trans., Phonak MLxi Receiver, Phonic Ear Easy Listener Trans., Phonic Ear Easy Listener Receiver, Phonic Ear Portable Loudspeaker, Phonic Ear Sprite Trans., Phonic Ear Sprite Receiver, Phonic Ear Front Row to Go Classroom System, Phonic Ear Hand-held Microphone, Ultratec TTY System, Telecaption 4000 with Remote

Students may accelerate their post-secondary education via enrollment in Lee Early College or Learn and Earn. Hardware and technical support has been made available to these students. E-rate funding has been obtained to provide additional bandwidth to the Early College, located on the campus of Central Carolina Community College.

Technology supports the Lee County Schools goals of providing a rigorous and relevant

education for every student; recruiting, employing, developing and retaining highly qualified employees; maintaining fiscal responsibility; providing a safe and secure environment; and promoting positive relationships. Teachers and administrators utilize technology to assess students, analyze data, provide effective classroom instruction, and offer necessary supplementary programs. Technology plays a critical support role in all mayor facets of Lee County Schools.

NC public schools will produce globally competitive students.
Strategic Technology Plan

Strategic Priority 1: NC public schools will produce globally competitive students.*

Strategic Goal: (Please check.)

- ❑ Every student excels in rigorous and relevant core curriculum that reflects what students need to know and demonstrate a global 21st Century environment, including a mastery of languages, an appreciation of the arts, and competencies in the use of technology.
- ❑ Every student's achievement is measured with an assessment system that informs instruction and evaluates knowledge, skills, performance, and dispositions needed in the 21st Century.
- ❑ Every student will be enrolled in a course of study designed to prepare them to stay ahead of international competition.
- ❑ Every student uses technology to access and demonstrate new knowledge and skills that will be needed as a life-long learner to be competitive in a constantly changing international environment.
- ❑ Every student has the opportunity to graduate from high school with an Associates Degree or college transfer credit.

Objective *1.1 Create a 21st century environment in which a student's achievement is measured and the information is used to inform instruction and evaluate a student's growth.*

Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Funding Sources	Time-line (Proposed Beginning & Ending dates)	Method of Evaluation	Evaluation Results July, 2013
1.1.1 Use data to drive instruction and staff development to improve mathematics/reading scores	Relevant curriculum software (Study Island, NovaNET, A.R. Accelerated Math, and AIMS web)	Administrators, math, reading teachers, curriculum coaches, ITFs	$75,000 per year	State and Local, Federal	Beginning July 2009-July 2013 Annual data analysis in July	Test Score Data, attendance for staff development, teacher self analysis	
Objective 1.2 Prepare students to access and demonstrate skills that will allow them to become a lifelong learner in a globally changing environment.							
1.2.1 *Provide more computers for*	Computers, software, teacher guides with student	Teachers, Administrators, ITF's and Chief Technology	$50,000 annually	State, Local, and Federal	July 2009-July 2013	AMTR	

students to have computer stations for technology integration	activities	Officer					
1.2.2 *Provide staff development for integration of computer skills across the curriculum.*	School level instructors, district instructors, Online resources, Internet access	Administrators, lead teachers, ITFs, Curriculum Coaches	$164,438 for Internet and WAN	State, Local, Federal	July 2009-July 2013 Annual data analysis in July	Schoollink	
1.2.3 *Increase computer skills test scores*	Smart Boards, projectors, wireless carts, Qwizdom units, staff development, teaching guides.	All School Personnel		State and Local	July 2009-July 2013 Annual data analysis in July	Computer Skills Test Scores	
1.2.4 *Provide SmartBoards for technology integration across the curriculum*	Smart boards, projectors for every grade level, staff development, teacher guides	Administrators, classroom teachers	$20,000 per year	State and Local	July 2009-July 2013 Annual data analysis in July	AMTR and professional development evaluations	
1.2.5 *Use problem based learning units (PBL's) to increase information technology skills*	PowerPoint, Internet access, PBL staff development, guides and activities, access to current resources	Administrators, classroom teachers	$62,100	State, Local, Federal	June 2009-June 2013 Annual data analysis in June	Student Projects, Evidence of professional development	

1.2.6 Increase School-level collaboration among Media and Technology.	Media Teachers and Technology	Media-Technology Team members	N/A		July 2009-July 2013	Meeting Minutes	
Objective 1.3 Use 21st century technology to prepare students to be globally competitive.							
1.3.1 Provide access to virtual school opportunities such as NCVPS, NovaNet, and Learn and Earn Apex Learning	Software, Internet access, video conferencing equipment	Central office personnel, curriculum coaches, ITFs, principals	$20,000 ($400 per course for approximately 50 students	State	July 2009-July 2013	Enrollment, Assessment data, Student surveys	
1.3.2 Invest in portable equipment for our special needs students	Printers, Laptops, docking stations, headphones, SmartBoard, Dynavox, Palm Pilots.	Special Education departments at each school	$5,000 annually	State, Local, and Federal	July 2009-July 2013	IEP Growth and Access to Technology Tools	
1.3.3 Use Global Exchange Projects to increase globally aware students.	Classroom computers, web-camera, Gaggle	Classroom teachers, ITF's,	$12,000 per year	Local and State	July 2009-July 2013	Classroom observation, AMTR, chat logs.	
1.3.4 Incorporate technology into daily lessons at the Early College to create global learners.	Computers, Internet access, Teachers, Software	Classroom teachers, ITF, Community Partners	$62,100	Local	July 2009-July 2013	Graduation Project, Lesson Plans, Classroom observation	

Lee County Schools will be led by 21st Century professionals.

Current Situation Narrative

Lee County Schools is committed to preparing all employees to be 21st Century professionals. The following staff development opportunities, technology resources, and procedures currently utilized will successfully and thoroughly prepare the district for the needs of the 21st century.

Lee County currently allocates twenty percent of the technology budget to technology professional development. Each school site requires at least ten hours of technology integration staff development. One CEU is required every five years for certificate renewal. Emphasis is placed on integration of technology into the various curriculums for enhancement of instruction. NC DPI resources such as eBistro, NCWise Owl, and Kaleidoscope are used in conjunction with site specific professional development needs as identified through the teacher/staff skills assessment. In addition to the technology staff development requirements, many school principals require additional technology training opportunities throughout the year.

Web 2.0 resources are part of the ten hour technology staff development at each school site. This includes the use of wikis, Google Earth, blogs, RSS feeds, podcasting, digital storytelling, Google applications, Voicethread, and United Streaming. Schools take advantage of translation media as we communicate with our growing Hispanic population.

Lee County has an Instructional Technology Facilitator at each high school, two at the three middle schools, and four at the seven elementary schools. Train-the-Trainer modeling is utilized throughout the Lee County School System. The two high schools and one middle school have training facilities with capabilities of accommodating ten users with desktop computers and additional technology equipment. Training is also provided for software and hardware based on individual school needs.

Currently, Lee County employees use NC WISE, CECAS, eProcurement, SchoolLink, USDDC, SchoolDude, CFNC, Futures4Kids, Career Choices, Bridges, ABC tools, AIMS Web, Class-Scape, Study Island, CTE Post Assessment Curriculum Items, various ancillary items as well as Human Resource Documents (employee timesheets, Individual Growth Plans, Observation and Evaluation Documents, Tuition Reimbursement, Travel Expenses, etc.)

NC public schools will be led by 21st Century professionals.
Strategic Technology Plan

Strategic Priority 2: NC public schools will be led by 21st Century professionals.*

Strategic Goal: (Please check.)

- ❑ Every teacher will have the skills to deliver 21st Century content in a 21st Century context with 21st Century tools and technology that guarantees student learning.
- ❑ Every teacher and administrator will use a 21st Century assessment system to inform instruction and measure 21st Century knowledge, skills, performance, and dispositions.
- ❑ Every education professional will receive preparation in the interconnectedness of the world with knowledge and skills, including language study.
- ❑ Every education professional will have 21st Century preparation and access to ongoing high quality professional development aligned with State Board of Education priorities.
- ❑ Every educational professional uses data to inform decision.

Objective 2.1 Increase technology proficiency and training of all faculty and staff with an emphasis on 21st century skills.

Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Funding Sources	Time-line (Proposed Beginning & Ending dates)	Method of Evaluation	Evaluation Results July, 2013
2.1.1 Provide professional development to help teachers integrate technology into the curriculum.	Internet access, SmartBoard, Projectors, Document Camera	ITF's, Chief Technology Officer	$62,100	Local, state, federal	Beginning September, 2009 Ending July, 2013	Sign in sheets, Training evaluations, Principal observations	
2.1.2 Expand online training opportunities	ITF's, Internet Access, technical department personnel	Chief Technology Officer, ITF's	$5,000	Local	Beginning September, 2009 Ending July, 2013	SchoolLink, number of hours completed online	
2.1.3 Provide professional development to integrate technology into the current state textbook adoption.	SmartBoard, ITF's, textbook software, Internet access, textbook consultants	Chief Technology Officer, ITF's	$315,395 (ITF salaries)	Local	Beginning September, 2009 Ending July, 2013	Sign in sheets, Training evaluations, Principal observations	

2.1.4 Provide district wide tech staff development training opportunities to promote global awareness	Web 2.0, wikis, Google Earth , blogs, RSS feeds, podcasting, Digital Storytelling, Google Applications, VoiceThread and United Streaming	ITFs, Chief Technology Officer	$315,395 (ITF salaries)	Local	Beginning September, 2009 Ending July, 2013	Sign in sheets, Training evaluations, Principal observations	
2.1.5 Evaluate Technology Trainings	Schoollink	Human Resources	$4,000	State	Beginning September, 2009 Ending July 2013	Schoollink	
2.1.6 Provide use of DPI resources (Kaleidoscope. NC Wise Owl)	Computer Lab, SmartBoard	Chief Technology Officer, ITFs	$315,395 (ITF salaries)	Local	Beginning September, 2009 Ending July, 2013		
2.1.7 Provide follow up support for technology integration.	ITFs, computers	Chief Technology Officer, ITFs	$315,395 (ITF salaries)	Local	Beginning September, 2009 Ending July, 2013	Web Resource, Schoollink	
Objective 2.2 21st Century Technology Assessment Skills and Strategies							
2.2.1 Utilize a teacher/staff skills assessment	On-line computer skills assessment	ITFs	$315,395 (ITF salaries)	Local	Beginning September 2009 Ending July, 2013	Analysis of on-line assessment data	
2.2.2 Implement technology effectively in the classroom	Computer Lab, SmartBoard, Classroom labs, Document Cameras, Digital Projectors	Classroom teachers	N/A	Local	Beginning September 2009 Ending July, 2013	Classroom observations and lesson plans	
Objective 2.3 Certified Personnel Professional Requirements							
2.3.1	ITFs, Chief	ITFs, Chief	N/A		Beginning	Schoollink and	

Require all certified personnel to complete 1.0 CEUs worth of technology training per renewal cycle	Technology Officer	Technology Officer, and Human Resources			September 2009 Ending July, 2013	State certification	
Objective 2.4 Ethical and Professional standards in the 21st century							
2.4.1 Promote ethical use of technology resources	NCWise Owl, NCWISE Student Info. System, ITFs, Media Specialists	Chief Technology Officer, ITFs, Media Coordinators	N/A		Beginning September 2009 Ending July, 2013	Sign in sheets, Training evaluations, Principal observations	

Lee County Schools students will be healthy and responsible.

Current Situation Narrative

Technology is used in a variety of ways to support Lee County Schools Safe Schools Plan. Physical safety is accomplished through use of electronic surveillance and School Resource Officers. Safety on the computer network is accomplished through a combination of desktop management via Novell Zenworks and individualized student and staff user accounts, Internet filtering with Smartfilter and safe electronic mail communication using Gaggle. Users must sign on with their own user account prior to accessing any electronic resources and can be tracked thereafter from a centralized location. This provides accountability on an individual level.

The Child Nutrition Department utilizes 21st century technology to support and streamline their work. Daily computer usage is imperative for the Child Nutrition Dept. to successfully function as all Point of Sale transactions are conducted and maintained through a computer program called MealsPlus. This same program also maintains student meal history and all data obtained from the cafeteria computers is aggregated at the central server located in the Child Nutrition Dept. at the district office. Food orders are conducted over the Internet as is meal data for USDA reimbursement. Additionally, form scanning and printing is performed from this server.

Several locations utilize electronic surveillance systems in the form of real time cameras to provide safety on campus. The cameras connect back to a central DVR located in the Administrative office area. Cameras are accessible via web browser to school administrators and SROs via web browser. Buses also contain video recording equipment and radios to help monitor and promote safety on school transport vehicles. Drivers of these vehicles are also equipped with cellular phones. Additionally, metal detectors are utilized in some locations in order to assure that students and staff do not enter district facilities carrying prohibited items.

Lee County Schools has adopted the GREAT program (Gang, Resistance, Education, and Training) to create and present this information, the school's resource officer uses a laptop, PowerPoint software, and projector. The presenter also uses a document camera to present relevant material (bandanas, photograph of graffiti, gang symbols, etc…) dealing with gang activity. This program is designed for 4th, 5th, and 6th grades. 6th graders are to present a project that consists of either a PowerPoint presentation or a webpage to show how to improve the school. Communities and schools are working closely to assist students in their goal to be productive citizens of Lee County. Communities in Schools was implemented to match mentors from the community and students (mentees) together. The mentors give support to the students in the form of electronic correspondence through Gaggle. Each mentor has to go through a complete background check before being selected to participate in the program.

Student discipline data is collected and aggregated in various electronic repositories and databases. Online systems such as USDDC and NCWISE allow school administrative staff to enter discipline reports in a central location and view the data at a later date in

order to plan improvement programs and observe trends and patterns. School Resource Officers also use a free program known as School COP for incident reporting. This program maintains a central database which is accessible to all SROs and contains reported incidents from all schools.

Access to resources is provided to both staff and students in a flexible manner. All network users are able to access their files and folders from anywhere inside the district. Access to technology is provided at all times during the school day and technology resources are available whenever needed.

Lee County Schools strives to maintain equitable access to technology resources throughout the school district. All sites are equipped with file, printing and application resources. Additionally, student to computer ratios are monitored to locate the sites most in need of additional computers and other technology equipment, including projectors, smart boards and other instructional equipment. This information is disseminated amongst school and district administrators to ensure equitable distribution of technology.

To meet the issues of ethical and personal responsibilities regarding technology, appropriate disciplinary actions are taken when users do not meet the standards stated in the policies and procedures set forth by Lee County Schools. When users do not assume an appropriate level of responsibility, their access to technology resources is removed, and depending on the severity of the incident further disciplinary action may be taken.

Lee County's existing policies and procedures are geared towards students in the 21st century. The global nature of information and data in this day and age provides a boundless resource for students to use in a responsible and ethical manner. Access to the Internet allows students to use resources from all over the world. Internet filtering technology ensures that students only access approved sites and material. Teachers and staff instruct students in proper methods of citing and giving credit to the original authors of the resources they use as well as proper MLA format. Instruction in copyright law is also provided by the media coordinators.

In today's fast paced digital world, information is thrown at students faster than ever. Lee County Schools uses technology to guarantee that students get information that will allow them to be better educated, healthier, and better behaved. Students are taught appropriate online behavior, safeguarded by Internet and e-mail filtering technologies and, in rare cases, disciplined when their actions do not meet the high standards that Lee County Schools requires.

Lee County Schools students will be healthy and responsible.
Strategic Technology Plan

Strategic Priority 3: NC public school students will be healthy and responsible.*

Strategic Goal: (Please check.)

- ❑ Every learning environment will be inviting, respectful, supportive, inclusive, and flexible for student success.
- ❑ Every school provides an environment in which each child has positive, nurturing relationships with caring adults.
- ❑ Every school promotes a healthy, active lifestyle where students are encouraged to make responsible choices.
- ❑ Every school focuses on developing strong student character, personal responsibility, and community/world involvement.
- ❑ Every school reflects a culture of learning that empowers and prepares students to be life-long learners.

Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Funding Sources	Time-line (Proposed Beginning & Ending dates)	Method of Evaluation	Evaluation Results July, 2013
Objective 3.1 All campus related activities will be closely monitored							
3.1.1 Deploy surveillance cameras in halls, playgrounds, and parking lots.	Cameras, computer equipment, software, equipment installation	Facilities Director Technology Coordinator (Chief Technology Officer)	$75,000	Local, state, federal, other	Beginning July, 2009 Ending May, 2013	Observation, discipline records, vandalism reports, maintenance agreements	
3.1.2 Continue to ensure all buses are equipped with cell phones and video cameras.	Cell phones, video cameras, equipment installation	Administrators Transportation Personnel	$9,600	Local, state, other	Beginning July, 2009 Ending May, 2013	Purchase Orders, receipts, and maintenance agreements	
3.1.3 Monitor use of photo ID system for staff	Staff ID badges	School Administrators, Human Resource Officer	$1536	Local	Beginning July, 2009 Ending May, 2013	Photo ID	
Objective 3.2 Students and teachers' electronic communication activities will be monitored, supervised, and filtered.							
3.2.1 Ensure Internet filtering software is	Computer Software and Technology Personnel	Chief Technology Officer and LAN Engineer	$14,000	Local, state, other	Beginning July, 2009	Internet filtering logs	

in place					Ending May, 2013		
3.2.2 Student email communication within the school district will be monitored for appropriateness.	Gaggle	CTO and Technology Support Staff	$12,000	Local, state, other	Beginning July, 2009 Ending May, 2013	HMS Report	
3.2.3 Filter, monitor, and archive staff email	E-mail archival Filtering software	CTO and WAN Engineer	$11,000	Local, State, other	Beginning July, 2009 Ending May, 2013	Spam filter logs and email archive	
Objective 3.3 Encourage staff and students to make responsible choices through district network/Internet policies and procedures.							
3.3.1 Require Internet Acceptable Use Forms to be signed prior to accessing the Internet	AUP Form	CTO, HR Director	$50	Local	Beginning July, 2009 Ending May, 2013	Filed forms	
3.3.2 Provide NCWise numbers for students	NCWISE Registration	Data Managers, Director of Accountability	N/A	N/A	Beginning July, 2009 Ending May, 2013	NC Wise Class Lists	
3.3.3 Provide staff and students with network usernames and passwords.	Novell	Technology Technician	$30,000	Local, state, other	Beginning July, 2009 Ending May, 2013	Novell Console One Database	
Objective 3.4 Classrooms will have accessibility to communication outside the class.							
3.4.1 Provide classrooms a working telephone or Intercom system.	Maintenance Agreement	CTO	$40,000	Local	Beginning July, 2009 Ending May, 2013	Equipment Orders, Maintenance Requests	

Objective 3.5 Utilize technology resources to educate, monitor, and maintain healthy student lifestyles.							
3.5.1 Implement a district wide electronic communication system.	AlertNow, Computer	CTO, trained school site personnel	$20,069	Local	Beginning July, 2009 Ending May, 2013	SchoolLink	
3.5.2 Use online media resources to promote healthy living.	United Streaming Videos.	CTO, teachers, and media coordinators	$24,155.83	Local	Beginning July, 2009 Ending May, 2013	United Streaming downloads, United Streaming Individual School Report	
Objective 3.6 Provide equitable access to media and technology resources.							
3.6.1 Use annual technology inventory data to measure schools' media and technology assets to determine equality	AMTR	CTO, assigned school site personnel, and technology technician	N/A	N/A	Beginning July, 2009 Ending May, 2013	AMTR Report	
Objective 3.7 Provide flexible access to media and technology resources.							
3.7.1 Provide teachers a system to search for available media resources.	Destiny and Internet access	Media Coordinators, CTO, and Network Administrators	$28,410	Local	Beginning July, 2009 Ending May, 2013	Destiny Logs	
3.72 Provide schools with staff common folders on the schools' network to share technology lessons and resources.	Common folders on school servers	Network Administrators	$459,027 (Technician salaries)	Local	Beginning July, 2009 Ending May, 2013	Shared contents of staff common folders	

Leadership will guide innovation in Lee County Schools

Current Situation Narrative

We have taken a collaborative leadership approach to developing our vision for technology within our school district. To ensure that we were receiving feedback for our technology programs and initiatives, we initiated our district budget process last winter using a more collaborative approach. Although principals and directors always have been encouraged to seek and provide feedback for funding, we utilized a different process by assembling principals together by levels with directors in meetings to articulate our district vision and prioritize our most pressing needs with the budget. This included numerous discussions regarding the role of technology and how it interacts with instruction in our district.

This process provided a more systemic approach to our budgeting process and removed some of the isolation that had existed before. It also ensured our senior staff, administrators and directors understood and took ownership in the direction in which we were headed. It allowed us to more efficiently distribute funds allocated from the federal state, and local levels to technological initiatives we deemed most critical to help our students succeed.

We also have taken a collaborative approach with the community. Our district level staff members routinely meet with community leaders regarding the state of our schools. We routinely seek their feedback concerning business needs regarding our graduates and how technology and innovation feed into their hiring practices of our graduates. We also search for partnerships to share ideas and resources regarding the expansion of technology in our community. The partnerships include such organizations as the Lee County Government Technology Department, the Lee County Economic Development Corporation, the Lee County Chamber of Commerce, and Central Carolina Community College.

Because of this collaboration, Lee County Schools has taken a futuristic approach to the needs of our students and staff by establishing North Carolina's first Science, Technology, Engineering, and Math (STEM) Middle School. We are optimistic that this pilot project will lead to the transformation of our other middle and high schools. The process will begin in 6th grade and will integrate science, technology, engineering, and math across the curriculum in core classes. The hub of the program will include the utilization of two labs capable of 20 instructional modules covering technologies that range from computer numerical control to video production. Each module has ten days of learning and fulfills 6 cross-disciplinary learning objectives that represent a mix of science, technology, engineering, math, and language components. A Train the Trainer model is being used to implement strategies from Marzano's research on Classroom Instruction that Works. McCrel is supporting these efforts with on-site training and additional support throughout this school year. Professional Learning Communities have developed to disseminate this information.

The district focus on the STEM school is just one of the ways leadership is addressing the Future Ready Goals. Other initiatives include a 9th Grade Academy and a Peer Remediation Program. Funding for both programs supported wireless carts for the Freshmen Academy program and the establishment of a lab for 40 computers to support Peer Tutoring. The teacher and assistant will supervise the students and provide tutoring support as well. Instructional Technology Facilitators deliver training to teachers on how to use Web 2.0 tools in the classroom. Monetary resources continue to target 21st Century tools such as mp3 players, document cameras, interactive boards, and new hardware. Bandwidth has been increased to support the increasing use of technology.

Multiple avenues are available to teachers and students to participate in teaching and learning outside their classroom. The district leaders have allotted resources for teacher leaders to attend state and national conferences. Students and staff engage in distance learning classes for individual staff development, required courses, and advanced degrees. Visiting International Facility members bring new experiences to our students and staff. They have been leaders in the use of Skype.

Each school offers ten hours of technology staff development. Teachers have the option of attending sessions at any school. Computer Camps are available for both students and staff during the summer to supplement individual needs. Trainers are given the opportunity to attend conferences to bring information back to the district. A staff development program, PD 360, will be made available to teachers this year.

The district has 100 MB of internet access and 100 Wide Area Network connections. Students benefit from the use of document cameras, digital cameras, mp3 players, computers, SmartBoards, projectors, and individual student response systems. All staff and students in grades 4-12 have e-mail.

Input from staff members is obtained through monthly School Improvement Team meetings, weekly grade-level meetings, and surveys. There are monthly Facilities and Technology board committee meetings. The Chief Technology Officer meets with principals individually and attends principal and director meetings. Media specialists meet quarterly. Instructional Technology Facilitators meet with the network administrators weekly to discuss classroom needs. The Technology Team meets monthly to address issues that the schools needs. Problems are reported by schools to an on-line database.

The Lee County Board of Education is a committee-based board. All media and technology information goes to the Curriculum and Instruction Committee or to the Facilities and Technology Committee. Board members invite teachers and administrators to address concerns and to showcase progress in these meetings.

Parent Teacher Organizations are a driving force in providing funds for technology and technology opportunities. Our Public Information Officer has worked to establish partnerships with businesses and industries for every school. The district enjoys a unique partnership with NC State University as well as the local community college. The

technology departments for the school system, city and county governments also partner to share knowledge and collaborate on county-wide efforts.

Leadership will guide innovation in NC public schools.
Strategic Technology Plan

Strategic Priority 4: Leadership will guide innovation in NC public schools.*

Strategic Goal: (Please check.)

- ❑ School professionals will collaborate with national and international partners to discover innovative transformational strategies that will facilitate change, remove barriers for 21st Century learning, and understand global connections.
- ❑ School leaders will create a culture that embraces change and promotes dynamic continuous improvement.
- ❑ Educational professionals will make decisions in collaboration with parents, students, businesses, education institutions, and faith-based and other community and civic organizations to impact student success.
- ❑ The public school professionals will collaborate with community colleges and public and private universities and colleges to provide enhanced educational opportunities for students.

Objective 4.1 Staff, through collaborative efforts, will develop learning strategies for the 21st Century student.

Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Funding Sources	Time-line (Proposed Beginning & Ending dates)	Method of Evaluation	Evaluation Results July, 2013
4.1.1 Provide grade level planning time with curriculum coach.	Curriculum coach Palm Pilots for assessments AIMS Web	Principals	$350,000.00	State, Federal	Beginning July, 2009 Ending July, 2013	AIMS Web data	
Objective 4.2 The school and system level leadership will provide opportunities for collaborative decision making that affect the use of and expenditures for technology.							
4.2.1 Schedule quarterly media/technology committee meetings.	School personnel	Committee chairman Principal	N/A		Beginning July 2009 Board Meeting Ending July 2013	Minutes from committee meetings	

Objective 4.3 Promote consistent use of technology as means of communication							
4.3.1 *Use Palm Pilots or Blackberry devices for communication and observation*	Palm Pilots Blackberry devices	Assistant Superintendent for Curriculum and Instruction Chief Technology Officer	N/A	Local	Beginning July 2009 Board Meeting Ending July, 2013	Data from communication devices	
Objective 4.4 Incorporate technology strategies into the classroom to improve student achievement using 21st Century skills							
4.4.1 *Provide professional growth opportunities*	Subscription for PD 360, ITF Workshops EBistro	Assistant Superintendent for Curriculum and Instruction ITF	$17,500	State	Beginning July 2009 Ending July, 2013	Sign in sheets Handouts SchoolLink	
Objective 4.5 Educational partnerships will be provided for teachers and students for educational opportunities through partnership the community, state, nation, and the world.							
4.5.1 *Maintain partnerships with companies, higher education institutions, professional organizations*	Wyeth NCSU Biotech Center	Assistant Superintendent for Curriculum and Instruction	N/A		Beginning July, 2009 Ending July, 2013	Sign in sheets Schedules Lesson plans	
Objective 4.6 Assess system level technology plan that addresses 21st Century Learning							
4.6.1 *Address ongoing change through AIMS Web assessment data and Palm Pilot data*	AIMS Web assessment data Palm Pilot data	Assistant Superintendent for Curriculum and Instruction	$23,375		Beginning July, 2009 Ending July, 2013	Data analysis	

NC public schools will be governed and supported by 21st Century systems.
Current Situation Narrative

Lee County Schools has taken numerous steps to facilitate a 21st century learning environment. Instructional Technology Facilitators are assigned to every school. Also, there are instructional assistants in every school to assist students. Lastly, media coordinators are located in every school.

In order to fund technology needs monies are derived from several sources. Local monies are provided for personnel. State monies derive from PRC15 and Fines and Forfeitures. Federal monies are secured thru the E-Rate program. In addition, if 74% of a school's population receives free and reduced lunch twice in a 5 year period, additional money will be allotted.

To ensure the vision of a 21st century learning environment, a formal budget request process has been established. The budget process begins in December when packets are distributed to all directors and principals. All budget requests are due to the district's Finance Department in January. In March, the Board of Education begins their work in preparing the budget request that is submitted to the local county finance office.

In addition to the established budget request process, outside funding resources such as grant and the utilization of professional grant writing services are promoted. The district is affiliated with the Donors Choose program and highly encourages teachers to use the program. There is a partnership in place with the Lee County Education Foundation which can provide funding for initiatives. The Superintendent sits on the board of the foundation. The district has joined several listservs to receive communications concerning grants. The district has contacts to hire professional grant writing services on a "as need" basis. Furthermore, the Chief Technology Officer applies for E-Rate monies annually.

Lee County Schools has built a foundation to support 21st century learning thru its policies, procedures, and review processes. Examples of this foundation are as follows:

Lee County Schools has enacted the following policies.
Policy 6523, Use of Computers
Policy 3225, Internet in the Educational Program
Policy 3227, Webpage Development
Policy 3220, Technology in the Educational Program
Policy 3230, Copyright Compliance
Policy 3210, Parental Inspection and Objection to Instructional Materials

Another important part of our foundation is a highly qualified staff. To ensure this component, our personnel department routinely reviews the technology requirements for certified staff and notifies applicable staff if requirements are not met. The county pays for a server based service named SchoolLink that monitors CEU credits. This service also allows staff to sign up for workshops to receive credit for CEUs and to monitor their

own CEU credits. Each school is assigned an ITF to offer a minimum of 10 hours technology instruction for staff. In addition, each school has a Media and Technology Committee that meets annually to document the progress of the technology program.

Furthermore, the district's infrastructure consists of a Metro Ethernet fiber WAN which provides 100 megabit fiber links between schools and a 10 gigabit link to the district office. Interschool communication is accomplished thru a switched Ethernet LAN with 1 gigabit fiber backbones. The district network is protected via Cisco firewall at the district office. PCs on the network are Pentium 4 or higher with at least 512 megabits of RAM. Access to pcs and applications are controlled thru Novell Zenworks desktop management software. Several schools provide secure wireless access for laptops. All server and network equipment is located in a climate controlled secured room at each school site and the district office.

To safeguard our most valuable resources, the district subscribes to AlertNow, a notification system that will alert parents and the community details concerning safety issues. Each school has security cameras. All classrooms at each school have telephones. In addition, each administrator at each school has a two way radio and all administrators have cell phones. All principals have Blackberries. Also, all district bus drivers have cell phones. Every Lee County Schools employee has an email address. Furthermore, all schools have access to the USDDC web based application that tracks all disciplinary actions concerning our LEA.

To facilitate communication in this 21st learning environment, all Lee County Schools personnel have email accounts and access to these accounts via web from home. Each school has its own server with a secure staff resource folder for the retrieval and saving of data files. Staff members share work in a common network folder. Teachers as well as students use wikis promote collaborative work.

Although Lee County Schools is in its inaugural year with the NCWise program, the district is utilizing numerous components of the system including online transcripts, testing, grade book, and attendance. From an administrative standpoint, NCWISE is used to report discipline incidents as well as federal and state reporting requirements such dropouts. Teachers have access to their student's historical testing data and information related to academic progress. As we complete our first entire school year in NCWISE, we will continue to expand our use of the various modules within eSIS.

NC public schools will be governed and supported by 21st Century systems.
Strategic Technology Plan

Goal 5: NC public schools will be governed and supported by 21st Century systems.*

Strategic Goal: (Please check.)

- ❑ Processes are in place for financial planning and budgeting that focuses on resource attainment and alignment with priorities to maximize student achievement.
- ❑ Twenty-first century technology and learning tools are available and are supported by school facilities that have the capacity for 21st Century learning.
- ❑ Information and fiscal accountability systems are capable of collecting relevant data and reporting strategic and operational results.
- ❑ Procedures are in place to support and sanction schools that are not meeting state standards for student achievement.

Objective 5.1 Management of Policies and Budget

Strategy	Resources Needed (Human & Material)	Person(s) Responsible	Budget Needs	Funding Sources	Time-line (Proposed Beginning & Ending dates)	Method of Evaluation	Evaluation Results July, 2013
5.1.1 Amend existing policies and develop new policies to meet requirements.	Lee County Schools Policy Manual NC School Board Association Lee County BOE Policy Committee Lee County BOE	Chief Technology Officer Superintendent Board Members	$1,600	Local	Beginning July, 2009 Ending July, 2010	Revised Policy Manual NCSBA Review Lee County BOE attorney review	
Objective 5.2 Increase the current level of funding of technology.							
5.2.1 Apply for public and private grants and funding resources that support	Grant Writers Grants Review K-12	Chief Technology Officer Director of Student Resources	$10,000	Local, State, Federal, Other	Beginning July, 2009 Ending July, 2013	Increased funding for technology	

technology.		Superintendent BOE Members					
Objective 5.3 Maintain all current positions and add staff.							
5.3.1 Add one full time technician.	Technical Staff	Chief Technology Officer Superintendent Personnel Department	$45,000	Local	Beginning July 2009 Ending July 2009	Number of Computers Technicians Funding and hiring of position	
5.3.2 Add one full time instructional technology facilitator.	Instructional Technology Facilitator	Chief Technology Officer Superintendent Personnel Department	$54,000	Local	Beginning July 2009 Ending July 2009	Number of Instructional Technology Facilitators Funding and hiring of position	
Objective 5.4 Provide continuous 21st Century technology security.							
5.4.1 Implement the use of monitoring software in all computer labs.	Technical staff Software	Chief Technology Officer Finance Committee Superintendent	$17,000	Local, State, Federal, Other	Beginning July 2009 Review annually	Invoice	
5.4.2 Maintain firewall and SPAM filter.	Technical staff Hardware	Chief Technology Officer	$5,000	Local, State, Federal, Other	Beginning July 2009	Invoice	

		Technical Staff			Review annually here after		
5.4.3 Maintain content filters for all schools	Technical staff Hardware	Chief Technology Officer Technical Staff	$14,000	Local, State, Federal, Other	Beginning July, 2009 Review annually	Invoice	
5.4.4 Maintain antivirus on all servers and administrative computers	Technical staff and hardware	Chief Technology Officer Technical Staff	$12,000	Local, State, Federal, Other	Beginning July 2009 Review Annually	Invoice	
Objective 5.5 Improve administrative applications utilized for student record management.							
5.5.1 Maintain use of NCWise	Technical Staff LAN Bandwidth	Chief Technology Officer, Director of Accountability Technical Staff	N/A	Local, State, Federal, Other	Beginning July 2009 Review annually	Invoice	
Objective 5.6 Provide and Maintain computer hardware levels to meet 21st Century standards.							
5.6.1 Continue purchasing current industry standard computers, data projectors, interactive whiteboards, and other computer related equipment	Computers, data projectors, interactive whiteboards, flash drives	Chief Technology Officer CTE Director EC Director Special Programs Director Principals	$300,000 annually	Local, State, Federal, Other	Beginning June 2008 – June 2012 Assessment annually in June	AMTR Report	

Objective 5.7 Increase infrastructures to adequately support the LAN demands.							
5.7.1 Maintain WAN and LAN	Technical Staff	Chief Technology Officer Technical Staff	$50,000	Local, State, Federal, Other	Beginning July 2009 – June 2013 Assessment annually in June	Utilization of networks Invoice	
5.7.2 Expand wireless connectivity district wide	Wireless access points Wireless PCI cards	Chief Technology Officer Technical Staff Leadership Team	$15,000	Local, State, Federal, Other	Beginning July 2009 Ending June 2013	Invoice	
5.7.3 Add switches to support intra-school network	53 network switches Technical Staff	Chief Technology Officer	$230,000	Local, State, Federal, Other	Beginning July 2009 Ending June 2013	Equipment in place Invoices	
Objective 5.8 21st Century Communication and Collaboration							
5.8.1 Maintain up to date email services for staff.	Technical Staff	Chief Technology Officer	$32,000	Local, State, Federal, Other	Beginning July 2009 Ending June 2013	Observation Invoice	
5.8.2 Provide email services for students grades 4-12	Technical Staff Gaggle	Chief Technology Officer	$18,000	Local, State, Federal, Other	Beginning July 2009 Ending June 2013	Observation Invoice	

Objective 5.9 Connect to a common educational network							
5.9.1 Connect to a common Educational Backbone using a telecommunications circuit to enhance educational opportunities by the most efficient means.	High Speed Connection to the NC Research and Education Network Technical support personnel	Technology Director Superintendent NC DPI	$25,000	To be paid for by NC DPI with fund granted by the general assembly to provide School Connectivity	Beginning January, 2008 This is an ongoing state initiative and will continue throughout this plan	Observation, document usage logs that will be provided to the LEAs	

Appendix A

Local Education Agency (LEA) Technology Plan
Policy, Procedure, & Guidelines Implementation Chart

Policies, Procedures, & Guidelines (Policies should be translated into predominant languages of students and parents)	**LEA Policy Code or Procedure**	**LEA Date of Adoption, Implementation or Revision**
Policies Required		
A. Materials Selection Policy (GS §115c-98(b))	3220; (see also 3200; 3210)	3220: 2/13/2006 3200: 12/11/2000 3210: 12/11/2000
B. Disposal of Equipment / Replacement of Obsolete Equipment (GS §115c-518)	6560	6560: 2/13/2006
C. Hardware and Software Procurement (GS § 115c-522, 115c-522.1)	3220 (see also 6430; 6440)	3220: 2/13/2006
D. Copyright Policy (PL §94-553, 90 Stat. 2541)	3230/7330	3230: 12/11/2000 & 7330: 12/11/2000
E. Acceptable Use Policy (PL §106-554)	3225/7320	3225: 2/13/2006 & 7320: 2/13/2006
F. Equipment/Materials Donation Policy (GS §115C-518	8220	8220: 2/13/2006
G. Data Privacy Policy (20 U.S.C. § 1232g; 34 CFR Part 99 (FERPA))	4700	4700: 2/11/2008
H. Inventory Control Policy (GS §115c-539, 115c-102.6A-C(5))	8350	8350: 4/4/2006
I. Access to Services Policy (GS §115c-106)	3227/7322	3227: 6/19/2007 & 7322: 6/19/2007
J. Student Discipline and Liability Policy (GS § 115C-391, 115C-398)	4300 series; 4330; 6550	4300: 6/9/2008 & 6550: 10/9/2000
K. Remote Access Policy (GS §147-33.111)	3220	3220: 2/13/2006
L. Virus Protection Policy (GS §147-33.111)	3220	3220: 2/13/2006
M. NC WISE ID and Password Workstation Policy (GS § 147-33.111)	3220	3220: 2/13/2006
N. Security Awareness Policy (GS §147-33.111)	3220	3220: 2/13/2006
O. Network Security Policy (SBE EEO-C-018, SB 991, 2004)	3220	3220: 2/13/2006
P. Advertising and Commercialism Policy (GS §115c-98)	5240 *	5240: 2/13/2006
Procedures		
A. Hardware and Software Deployment	See 3220	3220: 2/13/2006
B. Equipment maintenance and repairs	--	
C. Outdated Resources and Equipment Replacement	See 6560	6560: 2/13/2006
D. Disaster Recovery of Data and Hardware	3220	3220: 2/13/2006
E. Administration of Online Courses	--	
F. Other(s) (as needed by LEA)	--	
Guidelines		
A. Policy Translation	4003 *	4003: 2/13/2006

B. Web Site Development	3227/7322	3227: 6/19/2007 & 7322: 6/19/2007
C. Instructional Use of Videos	--	
D. Development of Online Resources	--	
E. Other(s) (as needed by LEA)	--	